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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Milton Silva-Craig

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MCANDREWS HELD & MALLOY, LTD
500 WEST MADISON STREET
SUITE 3400
CHICAGO, IL 60661

EXAMINER

TO, BAOQUOC N

ART UNIT

PAPER NUMBER

2162

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,471

Applicant(s)

SILVA-CRAIG ET AL.

Examiner

Baoquoc N. To

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. After carefully reviewing applicant remarks, the Office withdraws the Finality of the Office Action dated on 09/22/2004. The office regrets any inconveniences due to the applicants.

Claims 1-8, 11-20, 23-36 and 53-54 are pending in this application.

Response to Arguments

2. Applicant's arguments with respect to claims 1,3-4, 6, 8, 15, 19, 23, 35, 36 and 53 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US. Patent No. 6,678,703 B2) in view of Kumagai et al. (US. Patent No. 6,081,809).

Regarding on claims 1, Rothschild teaches a central medical data archiving system, said system comprising:

A medical data source providing medical data, where said medical data comprises at least one of a medical image, a medical patient report, and a medical application (a medical imaging system 10) (col. 18, lines 29-31); and

A centralized remote medical data store receiving said medical data and storing said medical data, wherein said centralized remote medical data store comprises an application service provider (ASP delivery the medical image from the medical image system 10 to the central servers (30' and 30'') (col. 28, lines 32-67).

Rothschild does not explicitly teaches status monitor for controlling the transfer of said medical data from said data source to a centralized remote data store, where said status monitor monitors operations occurring at least one of said data source and centralized remote data store and triggers transfer of said medical data to said centralized remote data store based on said operations. However, Rothschild teaches "the medical image centers track the entire process of image workstation (20) merely by reference to the local image workstation (20) located in their respective clinic or hospital" (col. 29, lines 12-16) and "local image workstation (20) archives the data locally, and then "pushes" (as explained in detail below) the electronic record to central data management system (30) at a remote location, as described in detail below" (col. 18, lines 53-56). On the other hand, Kumagai discloses most medical data is collected at irregular intervals from different human or machines sources, and is stored as a record in databases in the server computer. Some data regularly comes from various kinds of monitoring machines and directly enters to the process unit and memory of the file server 11...) (col. 14, lines 63-67 and col. 15, lines 1-2). Therefore, it would have

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been obvious to one ordinary skill in the art at the time of the invention was made at the time of the invention was made to modify Rothchild's system to include collecting the medical data at the irregular interval from human or machines source as taught by Kumagai in order to store the medical data at the central system for easy access.

Regarding on claim 2, Rothschild teaches status monitor verifies said transfer of said medical data from said data source to said remote data store (col. 29, lines 16-29).

Regarding on claim 5, Rothschild teaches said data source further stores medical data (the local workstation stored medical image data) (col. 28, lines 41-48).

Regarding on claim 7, Rothschild teaches the remote data store stores a copy of said medical data (the central storage system (130) stores all electronic record (5) at two central back-up sites one at 30' and 30") (col. 28, lines 41-51).

Regarding on claim 8, Rothschild teaches a second data source for storing medical data, wherein said remote data store transfers said medical data to said second data source (the central data management system (30) actively "push" the electronic record (5) and associated images (6) to the remote image viewing system (40) of the radiologists and referring doctors as soon as the images are available) (col. 22, lines 24-28).

4. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US. Patent No. 6,678,703 B2) in view of Kumagai et al. (US. Patent No. 6,081,809) and further in view of Alisuage (Pub. No. 2002/0083192 A1).

Regarding on claim 3, Rothschild and Kumagai do not explicitly teach an access authenticator for authenticating access to said remote data store by said data source. However, Rothchild discloses (login) (col. 22, line 29). On the other hand, Alisuag discloses authenticating access to said remote data store (paragraph 0045). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Rothchild and Kumagai system to include authenticating access medical data server as taught by Alisuag in order to grant access to restricted medical file only to authorized person or application.

Regarding on claim 4, Rothschild and Kumagai do not explicitly teach access authenticator authenticates access to said data source. However, Rothchild discloses (login) (col. 22, line 29). On the other hand, Alisuag discloses authenticating access to said remote data store (paragraph 0045). The authenticator is able to use to authenticate to the data source. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Rothchild and Kumagai system to include authenticating access medical data server or data source as taught by Alisuag in order to grant access to restricted medical file only to authorized person or application.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US. Patent No. 6,678,703 B2) in view of Kumagai et al. (US. Patent No. 6,081,809) and further in view of Dethloff (US. Patent No. 5,902,981).

Regarding on claim 6, Rothschild and Kumagai do not explicitly teach wherein said remote data store further restores said medical data to said data store. However, Dethloff discloses wherein said remote data store further restores said medical data to said data store (col. 1, lines 44-51). This teaches the restore is done in the event of failures. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Rothschild and Kumagai system to include the restoring the medical data in the event of lost as taught in Dethloff in order to restore the original files back to the system.

6. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US. Patent No. 6,678,703 B2) in view of Kumagai et al. (US. Patent No. 6,081,809) and further in view of Parvulescu et al. (US. Patent No. 6,678,764 B2).

Regarding on claims 11-14, Rothschild and Kumagai do not explicitly teach wherein said status monitor controls the transfer of data from said data store to said remote data store at a definable interval wherein said definable interval comprises a timed interval, event-based interval, or a manual interval. However, Rothchild teaches the automatically pushes the medical image to the central data management system (30) at a remote location (col. 18, lines 53-56) and once the electronic record (5) is received at central data management system (30), it is stored at the remote location and automatically routed., via "push" delivery to one or more remote image viewing system (col. 8, lines 63-67). This is the event based transferring. On the other hand,

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Parvulescu discloses "the picture are stored on the image archiving device 100' local hard disc drive 18 in a "session" format, one patient name being attached to a session. The session by be kept on local storage for any suitable period of time (e.g., 4 or 72 hours selectable) or until a user chooses to manually erase them. At convenient times (e.g., nightly or art periodic interval (e.g., every 72 hours erased and the disc storage freed for subsequently operations (e.g., the following morning). Preferably, the pictures will have been backed up onto a system server or other persistence storage to freeing the local storage" (col. 4, lines 61-67 to col. 5, lines 1-4). By erasing the medical data in the local drive manually and timed interval the system would have to back up these data based on these. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Rothchild and Kumagai system to include backing up data at timed interval and manually as taught by Parvulescu in order to allow the medical data to be backup for future restoration processes.

7. Claims 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US. Patent No. 6,678,703 B2) in view of Dethloff (US. Patent No. 5,902,981).

Regarding on claim 15, Rothschild teaches a system for remotely accessing a centralized data store, said system comprising:

A centralized remote data store storing medical data indexed according to data source, wherein said medical data comprises at least one of a medical image, a medical report, and a medical application, wherein said centralized remote data store comprises

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an application service provider (the central data management system stores the information from the automated forms of entry to the record via the respective local image workstation (20)) (col. 22, lines 25-67);

Rothschild does not explicitly teach status monitor for controlling the transfer of said medical data from said centralized remote data store to a data source, wherein said status monitor monitors actions occurring at data source and controls said centralized remote data store and said data source to transfer said medical data from said centralized remote data store to said data source based on trigger, wherein said trigger is based on an action occurring at said data source; and a data source receiving said medical data and storing said medical data. However, Dethloff teaches status monitor for controlling the transfer of said medical data from said centralized remote data store to a data source, wherein said status monitor monitors actions occurring at data source and controls said centralized remote data store and said data source to transfer said medical data from said centralized remote data store to said data source based on trigger, wherein said trigger is based on an action occurring at said data source; and a data source receiving said medical data and storing said medical data (col. 1, lines 43-51). As soon as the data lost in the medium restoration is triggered and restore the data by the remote terminal. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Rothschild's system to include event triggering for restoration process soon as the data stored on the medium is lost as taught by Dethloff in order to restore any lost data from the processing system.

Regarding on claim 16, Rothschild teaches a second data source storing medical data (a remote user) (col. 22, lines 35-40).

Regarding on claim 17, Rothschild teaches the status monitor controls the transfer of said copy of said medical data between said remote data store and said second data source (location identified) (col. 22, lines 35-40).

Regarding on claim 18, Rothschild teaches the status monitor verifies the transfer of said copy of said medical data between said remote data store and said second data source (it also assures prompt delivery of a report from the remote user and back through the ASP system to other location identified) (col. 22, lines 38-40).

Regarding on claim 20, Rothschild teaches the status monitor verifies said transfer of said medical data between data source and said remote data store (it also assures prompt delivery of a report from the remote user and back through the ASP system to other location identified) (col. 22, lines 38-40).

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US. Patent No. 6,678,703 B2) in view of Dethloff (US. Patent No. 5,902,981) and further in view of Alisuage (Pub. No. 2002/0083192 A1).

Regarding on claim 19, Rothchild and Dethloff do not explicitly teach an access authenticator for authenticating access to said remote data store. However, Rothchild discloses (login) (col. 22, line 29). On the other hand, Alisuag discloses authenticating access to said remote data store (paragraph 0045). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify

Rothchild and Dethloff system to include authenticating access medical data server as taught by Alisuag in order to grant access to restricted medical file only to authorized person or application.

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US. Patent No. 6,678,703 B2) in view of Dethloff (US. Patent No. 5,902,981) and further in view of Dethloff (US. Patent No. 5,902,981)

Regarding on claim 23, Rothschild and Dethloff do not explicitly teach the remote data store restores said medical data at said data source. However, Dethloff discloses wherein said remote data store further restores said medical data to said data store (col. 1, lines 44-51). This teaches the restore is done in the event of failures. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Rothschild and Dethloff system to include the restoring the medical data in the event of lost as taught in Dethloff in order to restore the original files back to the system.

10. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US. Patent No. 6,678,703 B2) in view of Dethloff (US. Patent No. 5,902,981) and further in view Parvulescu et al. (US. Patent No. 6,678,764 B2).

Regarding on claim 24, Rothschild does not explicitly teach the remote data store comprises at least one directory corresponding to said data source. However, Parvulescu teaches "so, if Doctor Gooden is performing the procedures on patient John

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Doe, then the captured images are stored in a folder called "Gooden", with each file in the folder incorporating a standard syntax including patient's name, image number, hospital/practice name, time & date, and procedure information as described above" (col. 9, lines 23-28). This teaches the captured images of the treated patient are organized in the memory as the folder or directory. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the Rothschild's system to include the captured images data to store in the folder or directory in order to easily retrieve the file the in the organized database.

11. Claims 25-29, 31-34 and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US. Patent No. 6,678,703 B2) in view of Parvulescu et al. (US. Patent No. 6,678,764 B2).

Regarding on claim 25, Rothschild teaches a method for remotely archive data said method comprising:

Detecting an operation involving medical data executed at a medical data source (soon as the record input to a local image work station and archiving locally, the database management automatically pushes the electronic records and associated images to the remote image viewing system) (col. 22, lines 24-67);

transferring said medical data from said medical data source to a centralized remote data store based on a trigger, wherein said trigger is produced based on said operation executed at said data source, wherein said medical data comprises at least one of a medical image, a medical report, and a medical application (the medical image

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of the patient is automatically pushed to the remote image viewing as soon as record inputted) (col. 22, lines 24-67); and

storing the medical data at said centralized remote data store (once the electronic record (5) is received at central data management system (30), it is stored at the remote location and automatically routed., via "push" delivery...) (col. 18, lines 63-67).

Rothchild does not explicitly teach indexing said medical data according to said data source. However, Parvulescu teaches, "in accordance with a preferred embodiment, the stored images are indexes via a predictable syntax..." (col. 4, lines 51-60) and "preferably, the pictures will have been backed up onto a system server or other persistent storage prior to freeing to the local storage" (col. 5, lines 2-4). The medical images are indexed in backup data storage as they are indexed local terminal. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Rothschild's system to include indexing the medical images same as to the backup system server as taught in Parvelescu in order to easily restoration of the medical images when needed.

Regarding on claim 26, Rothschild teaches the step of obtaining said medical data (col. 22, lines 66-67).

Regarding on claim 27, Rothschild teaches the step of storing said medical data at said data source (stored at the workstation) (col. 18, lines 46-48).

Regarding on claim 28, Rothschild does not explicitly teach storing step further comprises storing said medical data at said remote in a directory corresponding to said

data source. However, Parvulescu teaches "so, if Doctor Gooden is performing the procedures on patient John Doe, then the captured images are stored in a folder called "Gooden", with each file in the folder incorporating a standard syntax including patient's name, image number, hospital/practice name, time & date, and procedure information as described above" (col. 9, lines 23-28). This teaches the captured images of the treated patient are organized in the memory as the folder or directory. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the Rothschild's system to include the captured images data to store in the folder or directory in order to easily retrieve the file the in the organized database.

Regarding on claim 29, Rothchild teaches transferring step further comprises verifying said transfer of medical data from said remote data store to said data source (col. 32, lines 35-39).

Regarding on claims 31-34, Rothschild does not explicitly teaches said transferring step occurs after a definable interval comprises a timed interval, event-based interval, and a manual interval. However, Rothchild teaches the automatically pushes the medical image to the central data management system (30) at a remote location (col. 18, lines 53-56) and once the electronic record (5) is received at central data management system (30), it is stored a the remote location and automatically routed., via "push" delivery to one or more remote image viewing system (col. 8, lines 63-67). This is the event based transferring. On the other hand, Parvulescu discloses "the picture are stored on the image archiving device 100' local hard disc drive 18 in a "session" format, one patient name being attached to a session. The session by be

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kept on local storage for any suitable period of time (e.g., 4 or 72 hours selectable) or until a user chooses to manually erase them. At convenient times (e.g., nightly or at periodic interval (e.g., every 72 hours erased and the disc storage freed for subsequently operations (e.g., the following morning). Preferably, the pictures will have been backed up onto a system server or other persistence storage to freeing the local storage" (col. 4, lines 61-67 to col. 5, lines 1-4). By erasing the medical data in the local drive manually and timed interval the system would have to back up these data based on these. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Rothchild's system to include backing up data at timed interval and manually as taught by Parvulescu in order to allow the medical data to be backup for future restoration processes.

Regarding on claim 53, Rothschild teaches a dedicated network connection for transferring said medical data between said medical data source and said centralized remote medical data store (col. 19, lines 36-39).

Regarding on claim 54, Rothschild teaches a private network connection for transferring said medical data between said data source and said centralized remote data store (non publish accessed) (col. 19, lines 36-39).

12. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US. Patent No. 6,678,703 B2) in view of Parvulescu et al. (US. Patent No. 6,678,764 B2) and further in view of Alisuag (Pub. No. 2002/0083192 A1)

Regarding on claim 30, Rothschild does not explicitly teach authenticating access to said remote data store. However, Rothchild discloses (login) (col. 22, line 29). On the other hand, Alisuag discloses authenticating access to said remote data store (paragraph 0045). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Rothchild's system to include authenticating access medical data server as taught by Alisuag in order to grant access to restricted medical file only to authorized person or application.

13. Claims 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US. Patent No. 6,678,703 B2) in view of Parvulescu et al. (US. Patent No. 6,678,764 B2) and further in view of Dethloff (US. Patent No. 5,902,981).

Regarding on claim 35, Rothschild and Parvulescu do not explicitly teach the step of restoring said medical data to said data source from said remote data source. However, Dethloff discloses the step of restoring said medical data to said data source from said remote data source (col. 1, lines 44-51). This teaches the restore is done in the event of failures. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Rothschild and Parvulescu system to include the restoring the medical data in the event of lost as taught in Dethloff in order to restore the original files back to the system.

Regarding on claim 36, Rothchild and Parvulescu do not explicitly teach the step of copying said medical data from said remote data source to a second data source. However, Dethloff teaches the step of copying said medical data from said remote data

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source to a second data source (col. 1, lines 44-51). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Rothschild and Parvulescu system to include the restoring by copy the medical data into the medium as taught in Dethloff in order to restore the original files back to the system.

Contact Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:


Commissioner of Patents and Trademarks
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(571) –273-8300 [Official Communication]

BQ To

December 11th, 2005


SEAN M. PARVULESCU
PRIMARY EXAMINER